
Awareness of, Use and Perception of Efficacy of Alternative Therapies by Patients with Inflammatory Arthropathies

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Abstract

Fifty one patients with chronic inflammatory polyarthritis were surveyed on unconventional treatments they used to self-treat their condition. Awareness of the availability of alternative therapies (ATs) was universal. Sixty-six percent (66%) of patients had tried one or more ATs. The most popular ATs were dietary manipulation (no red meat, dosing with vinegar and honey), the wearing of magnets and copper bracelets, and acupuncture. The best predictors of AT use were male sex, Caucasian race and formal education beyond high school. Numbers were too small to make definitive statements about perceptions of efficacy, but the users of magnets and fish oils tended to be dissatisfied with these ATs, while those who had tried bee stings, herbs and hormones claimed effectiveness.

Introduction

Alternative treatments (ATs) are widely used by patients with arthritis.¹ In the 48 contiguous states, utilization patterns favor educated, middle class persons between the ages of 25 to 49.² In a rural North Carolina study,³ African-American adults with arthritis were found to make greater use of ATs compared to European-Americans.

Hawaii is a multiracial community with no one ethnic group constituting a numerical majority. According to the 1990 Census, Caucasians comprise 33.4% of the population, Japanese 22.3 %, Filipinos 15.2 %, Hawaiians and part-Hawaiians 12.5%; the remaining 16.6% include the Chinese, Portuguese, Koreans and a smattering of other races. The authors embarked upon this study with the hypothesis that non-Caucasians closer to the Asian medical traditions would use ATs more frequently.

Methods

Fifty one consecutive adult patients with inflammatory arthropathies from the islands of Kauai and Oahu were administered an in-office survey about their awareness of, use and impressions of efficacy of 23 ATs. The list was gleaned from a patient-information brochure published by the Arthritis Foundation on unproven remedies, and supplemented by the clinical experience of one of the authors (TDC). The ATs were: acupuncture, alfalfa, bee stings, black walnuts, chiropractic, copper bracelets, fasting, fish oils, herbs, homoeopathy, hormones, the "immune power diet", magnets, "metabolic therapy", elimination of red meat from the diet, elimination of pork, avoidance of nightshade vegetables, the use of plant oils, reflexology, tai chi, vaccines, and drinking vinegar and honey. The survey was explained by the attending physician, and the patients were asked to complete the survey privately. Completed surveys were sealed, collected and collated in a manner that preserved the patient's anonymity.

Results

The 51 patients completing the survey had a mean age of 51 years (range 26 to 81) and a mean disease duration of 9 years (range 1-42). The male-to-female ratio was 10:41, in accord with the known predominance of inflammatory arthropathies in females. The average number of years of formal education did represent graduation from high school (mean 13 years; range 2 to 24). Self-reported racial classification results were as follows: Caucasian 13, Japanese 13, Filipinos 5, Chinese 3, Pacific Islander 5, African American 1, mixed race 11.

Awareness of ATs was universal. Every single patient reported having heard of the utility of at least one of the ATs in the list for his/her condition (Table 1). Over two-thirds (69%) of the group had tried at least one AT. The most popular ATs were dietary manipulation, magnets, copper bracelets and acupuncture.

The following demographic subgroups admitted to the most AT use: males, Caucasian race, and formal education beyond high school (Table 2).

User subgroup numbers were too small to make definitive statements about perceptions of efficacy, but users of magnets, fish oils and acupuncture tended to report dissatisfaction with the results they had obtained. (Table 3).

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Table 1. Awareness of Alternative Therapies per Demographic Group*											
	Total who have heard of it	Disease Duration	Disease Duration	Age	Age	Yrs of Formal Educa- tion	Yrs of Formal Educa- tion	Sex	Sex	Race	Race
Item		≤ 5 yrs	> 5 yrs	≤ 40 yrs	> 40 yrs	≤ 12 yrs	> 12 yrs	Male	Female	Cauca- sian	Asian
Acupunc- ture	43 84	23 88	20 80	14 100	29 78	22 78	21 91	9 90	34 83	11 85	19 90
Alfalfa	21 41	10 38	11 44	6 43	15 40	10 36	11 48	5 50	16 39	7 54	8 38
Bee Stings	25 49	12 46	13 52	7 50	18 49	12 43	13 56	5 50	20 49	7 54	11 52
Black Walnuts	5 10	2 8	3 12	1 7	4 11	3 11	2 9	1 10	4 10	1 8	2 9
Chiro- practor	27 53	13 50	14 56	9 64	18 48	13 46	14 60	4 40	23 56	9 69	9 43
Copper Bracelet	38 75	21 81	17 68	11 78	27 73	17** 61	21** 91	7 70	31 76	11 84	17 81
Fasting	16 31	10 38	5 20	6 43	10 27	7 25	9 39	3 30	13 32	4 30	5 24
Fish Oils	26 51	13 50	13 52	8 57	18 48	11 39	15 65	8** 80	18** 44	8 61	12 57
Herbs	29 57	15 58	14 56	11 78	18 49	16 57	13 56	5 50	24 58	7 54	12 57
Homeo- pathy	14 27	6 23	8 32	7** 50	7** 19	5 17	9 41	3 30	11 37	7** 54	3** 14
Hor- mones	12 24	6 23	6 24	4 28	8 22	5 17	7 30	1 10	11 27	4 30	5 24
"Immune Power Diet"	6 12	0** 0	6** 24	2 14	4 11	2 7	4 17	0 0	6 15	3** 23	1** 4
Magnets	27 53	17 65	10 40	8 57	19 51	15 53	12 52	4 40	23 56	5 38	14 67
Metabolic Therapy	2 4	0 0	2 8	1 7	1 3	1 3	1 4	0 0	2 5	1 8	1 4
No Meat	19 37	10 38	9 36	6 43	13 35	11 39	8 35	4 40	15 36	6 46	6 28
No Night- shades	14 27	5 19	9 36	4 28	10 27	7 25	7 30	3 30	11 27	4 30	6 28
No pork	14 27	9 35	5 20	1** 7	13** 35	9 32	5 22	4 40	10 24	3 23	6 28
No Red Meat	20 39	10 38	10 40	4 28	16 43	12 42	8 35	5 50	15 36	6 46	9 43
Plant Oils	9 18	5 19	4 16	4 28	5 13	5 18	4 17	3 30	6 15	1 8	4 19
Reflex- ology	12 24	8 31	4 16	5 32	7 19	2** 7	10** 43	2 20	10 24	6 46	4 19
TaiChi	22 23	13 50	9 36	9 64	13 35	9 32	13 56	6 60	16 39	5 38	8 38
Vaccines	8 16	2 8	6 24	1 7	7 19	5 18	3 13	2 20	6 15	3 23	4 19
Vinegar & Honey	25 49	10 38	15 60	7 50	18 35	12 43	13 56	5 50	20 48	6 46	4 19
Total in subgroup	51	26	25	14	31	28	23	10	41	13	21

* Data expressed as N % of Total

** Chi square statistic significant at 5%

Table 2. AtUse PerDemographic Group*											
		Disease Duration	Disease Duration	Age	Age	Yrs of Formal Educa- tion	Yrs of Formal Educa- tion	Sex	Sex	Race	Race
	Total who have Used it	≤ 5 yrs	> 5 yrs	≤ 40 yrs	> 40 yrs	≤ 12 yrs	> 12 yrs	Male	Female	Cauca- sian	Asian
Acupunc- ture	9	5 19	4 16	3 21	6 16	3 11	6 26	1 10	8 19	4 31	4 19
Alkalä	3	0 0	3 12	1 7	2 5	1 4	2 9	2 20	1 2	1 8	2 10
Bee Stings	2	0 0	2 8	0 0	2 5	2 7	0 0	0 0	2 5	0 0	2 10
Black Walnuts	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Chiro- practor	7	5** 19	2** 8	3 21	4 8	3 11	4 17	2 20	5 12	0 0	2 10
Copper Bracelet	11	8 31	3 12	3 21	8 21	7 25	4 17	1 10	10 24	1 8	5 24
Fasting	3	2 8	1 4	1 7	2 5	2 7	1 4	2 20	1 2	2 26	1 5
Fish Oils	12	4 15	8 32	4 28	8 21	6 21	6 26	3 30	9 22	5 38	4 19
Herbs	4	3 12	1 4	2 14	2 5	2 7	2 9	3** 30	1** 2	1 8	1 5
Homeo- pathy	3	1 4	2 8	1 7	2 5	2 7	1 4	0 0	3 7	1 8	1 5
Hor- mones	2	1 4	1 4	1 7	1 2	1 4	1 4	0 0	2 5	2 26	0 0
"Immune Power Diet"	1	0 0	1 4	1 7	0 0	0 0	1 4	0 0	1 2	1 8	0 0
Magnets	9	6 23	3 12	4 28	5 14	4 14	5 22	1 10	8 19	2 26	4 19
Metabolic Therapy	1	0 0	1 4	0 0	1 2	1 4	0 0	0 0	1 2	0 0	0 0
No Meat	8	3 12	5 20	4 28	4 8	3 11	5 22	1 10	7 17	5 38	2 10
No Night- shades	7	2 8	5 20	2 14	5 14	3 11	4 17	2 20	5 12	3 23	1 5
No pork	7	4 15	3 12	0 0	7 19	4 14	3 13	2 20	5 12	2 23	2 10
No Red Meat	11	4 15	7 28	3 21	8 21	7 25	4 17	4 40	7 17	5 38	3 14
Plant Oils	2	1 4	1 4	2** 14	0** 0	1 4	1 4	1 10	1 2	1 8	0 0
Reflex- ology	4	2 8	2 8	2 14	2 5	0** 0	4** 17	0 0	4 9	1 8	1 5
TaiChi	1	1 4	0 0	1 7	0 0	1 4	0 0	0 0	1 17	0 0	0 0
Vaccines	1	1 4	0 0	0 0	1 2	1 4	0 0	1 10	0 0	0 0	0 0
Vinegar & Honey	11	4 15	7 28	4 28	7 19	5 18	6 26	2 20	9 22	1 8	4 19
Ave # Items used	2.30	2.19	2.48	2.00	2.08	2.11	2.61	2.80	2.22	2.90	1.62

* Data expressed as N % of Total

** Chi square statistic significant at 5%

*** T Statistic not significant between demographic subgroups

Table 3. Perception of Efficacy			
Alternative Treatment	Number Using	# who think it is effective (%)	# who think it is ineffective (%)
Acupuncture	9	3 (33)	6 (67)
Alfalfa	3	2 (67)	1 (33)
Bee Stings	2	2 (100)	0 (0)
Black Walnuts	0	0	0
Chiropractor	7	4 (57)	3 (43)
Copper Bracelet	11	4 (36)	7 (64)
Fasting	3	2 (67)	1 (33)
Fish Oils	12	4 (33)	8 (67)
Herbs	4	4 (100)	0 (0)
Homeopathy	3	2 (67)	1 (33)
Hormones	2	2 (100)	0 (0)
"Immune Power Diet"	1	1 (100)	0 (0)
Magnets	9	1 (11)	8 (89)
Metabolic Therapy	1	1 (100)	0 (0)
No Meat	8	4 (50)	4 (50)
No Nightshades	7	4 (57)	3 (43)
No pork	7	4 (57)	3 (43)
No Red Meat	11	6 (55)	5 (45)
Plant Oils	2	1 (50)	1 (50)
Reflexology	4	2 (50)	2 (50)
Tai Chi	1	1 (100)	0 (0)
Vaccines	1	1 (100)	0 (0)
Vinegar & Honey	11	4 (36)	7 (64)

Discussion

The interest in and use of unproven remedies is widespread in the United States and cuts across race, gender and age groups. In this study, educated male Caucasians still appear to be the highest users of ATs, confirming the trend reported by Eisenberg et al (2). This is true even in Hawaii, where multiple Asian cultures and their medical systems and practitioners exist side-by-side with conventional allopathic medicine. This is information that is important to the providers and payers of health care, suggesting that insurers marketing to the employed, educated Caucasian male may gain a marketing advantage by paying attention to ATs.

Two possible design features may have resulted in the underreporting of AT use by Asians. First, many Asians still consider the patient-physician relationship as patriarchal, and patients may have hesitated (despite reassurances of anonymity) to admit using modalities that their physician did not prescribe or could object to. Second, the list of ATs may not have adequately included treatments routinely used by Asian cultures, having been generated from a patient information brochure designed for the average American on the mainland.

The impressions of efficacy reported by the surveyed patients are difficult to interpret. No methodologic standardization could be undertaken given the study design. Only superficial descriptions of satisfaction were obtainable, subjectively and retrospectively. Nonetheless, these broad strokes point to those areas that may lend themselves most easily to prospective, controlled trials.

Since this survey was conducted, many other ATs have entered the Hawaii market, mostly in the form of herbal encapsulations and supplements. These preparations get to patients via retail stores, direct mail, multi level marketers and alternative practitioners. Further study of patterns of spending, use and perceived effectiveness, as well as prospective controlled trials of usefulness, tolerability and side effects need to be pursued.

References

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